## SECTION

Other services

Dialysis Hospice Clinical laboratory

Number of dialysis facilities is growing, and most Chart 11-1. facilities are for profit and freestanding

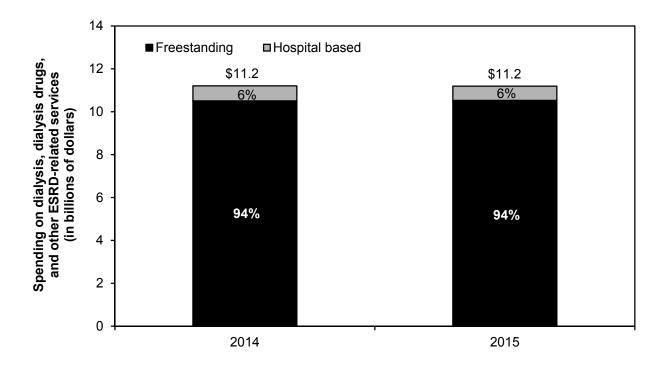
		Average percent	
	2016	2011–2016	2015–2016
Total number of:			
Dialysis facilities	6,745	3%	4%
Hemodialysis stations	117,198	3	3
Mean number of			
hemodialysis stations per facility	17	-0.3	-0.8
	Percent of total		
Hospital based	6%	<b>–</b> 5	<b>–</b> 1
Freestanding	94	4	5
Urban	82	4	5
Rural, micropolitan	11	1	2
Rural, adjacent to urban	5	2	2
Rural, not adjacent to urban	3	3	4
Frontier	0.5	2	0
For profit	88	4	5
Nonprofit	12	-2	-0.4

Note: "Nonprofit" includes facilities designated as either nonprofit or government. "Average annual percent change" is based on comparing 2011, 2015, and 2016 end-of-year files. Components may not sum to totals due to rounding.

Source: Compiled by MedPAC from the 2011, 2015, and 2016 CMS Dialysis Compare end-of-year files.

- Between 2011 and 2016, the number of facilities has increased 3 percent per year. The average size of a facility has remained relatively constant, averaging about 17 dialysis treatment stations per facility (17.7 stations in 2011, 17.5 stations in 2015, and 17.4 stations in 2016).
- Since 2011, facilities' capacity to provide care—as measured by dialysis treatment stations—also grew 3 percent annually. Capacity at urban facilities grew by 3 percent per year while capacity at rural facilities grew at a rate of 2 percent per year (data not shown).
- Since 2011, the number of freestanding and for-profit facilities increased, while hospitalbased and nonprofit facilities decreased. Freestanding facilities increased from 90 percent to 94 percent of all facilities, and for-profit facilities increased from 84 percent to 88 percent of all facilities.

Chart 11-2. Medicare spending for outpatient dialysis services furnished by freestanding and hospital-based dialysis facilities, 2014 and 2015



Note: ESRD (end-stage renal disease).

Source: Compiled by MedPAC from the 2014 and 2015 institutional outpatient files from CMS.

 In 2015, total spending for dialysis, dialysis drugs, and ESRD-related clinical laboratory tests was \$11.2 billion. In 2015, Medicare paid all facilities under a modernized prospective payment system that includes in the payment bundle certain dialysis drugs and ESRDrelated clinical laboratory tests that were separately paid before 2011.

- Between 2014 and 2015, total ESRD expenditures remained relatively flat at \$11.2 billion in both years.
- Freestanding dialysis facilities treated most dialysis beneficiaries and accounted for 94 percent of expenditures in 2015.

Chart 11-3. The ESRD population is growing, and most ESRD patients undergo dialysis

	2004	2004		2010		2014	
	Patients (thousands)	Percent	Patients (thousands)	Percent	Patients (thousands)	Percent	
Total	466.0	100%	591.8	100%	678.4	100%	
Dialysis	331.2	71	414.4	70	477.5	70	
In-center hemodialysis	300.3	64	373.5	63	420.0	62	
Home hemodialysis*	1.8	0.4	6.5	1	8.6	1	
Peritoneal dialysis*	27.8	6	32.7	6	46.6	7	
Unknown	1.3	0.3	1.9	0.3	2.3	0.3	
Functioning graft and							
kidney transplants	134.8	29	177.4	30	200.9	30	

Note: ESRD (end-stage renal disease). Totals may not equal sum of components due to rounding. Data include both Medicare and non-Medicare patients.

Source: Compiled by MedPAC from the United States Renal Data System.

- Persons with ESRD require either dialysis or a kidney transplant to maintain life. The total number of ESRD patients increased by 4 percent annually between 2004 and 2014.
- In hemodialysis, a patient's blood flows through a machine with a special filter that removes wastes and extra fluids. In peritoneal dialysis, the patient's blood is cleaned by using the lining of his or her abdomen as a filter. Peritoneal dialysis is the most common form of home dialysis.
- Most ESRD patients undergo hemodialysis administered in a dialysis facility three times a week. Between 2004 and 2014, the total number of in-center hemodialysis patients grew by 3 percent annually while the total number of peritoneal dialysis patients increased by 5 percent annually. Although a smaller proportion of all dialysis patients undergo home hemodialysis, the number of these patients grew 17 percent per year during this period.
- Functioning graft patients are patients who have had a successful kidney transplant. Patients undergoing kidney transplant may receive either a living kidney or a cadaveric kidney donation. In 2014, 31 percent of transplanted kidneys were from living donors and the remainder were from cadaver donors (data not shown).

<sup>\*</sup>Home dialysis methods.

Chart 11-4. Asian Americans and Hispanics are among the fastest growing segments of the ESRD population

	Percent of total in 2014	Average annual percent change 2009–2014
Total ( <i>N</i> = 678,383)	100%	4%
Age (years)		
0–17	1	0.1
18–44	16	1
45–64	44	3
65–79	31	6
80+	9	4
Sex		
Male	58	4
Female	42	3
Race/ethnicity		
White	61	4
African American	31	3
Native American	1	2
Asian American	6	6
Hispanic	17	5
Non-Hispanic	83	3
Underlying cause of ESRD		
Diabetes	38	4
Hypertension	25	4
Glomerulonephritis	16	2
Other causes	21	3

Note: ESRD (end-stage renal disease). Totals may not equal sum of the components due to rounding. ESRD patients include those who undergo maintenance dialysis and those who have a functioning kidney transplant.

Source: Compiled by MedPAC from the United States Renal Data System.

- Among ESRD patients, 40 percent are over age 65. About 60 percent are White.
- Diabetes is the most common cause of renal failure.
- The number of ESRD patients increased by 4 percent annually between 2009 and 2014. Among the fastest growing groups of patients are Asian Americans and Hispanics.

**Characteristics of Medicare fee-for-service dialysis** Chart 11-5. patients, 2015

P	ercent of all FFS dialysis patients
Age (years)	
Under 45	11%
45–64	38
65–74	27
75–84	18
85+	6
Sex	
Male	55
Female	45
Race	
White	48
African American	36
All other	17
Residence	
Urban county	82
Rural county, micropolitan	11
Rural county, adjacent to urban	5
Rural county, not adjacent to urban	3
Frontier county	1
Prescription drug coverage status	
Enrolled in Part D plan or other source of creditable drug co	verage 90
LIS	58
Dually eligible for Medicare and Medicaid	48

Note: FFS (fee-for-service), LIS (low-income [drug] subsidy). Urban counties contain a core area with 50,000 or more people, rural micropolitan counties contain at least one cluster of at least 10,000 and fewer than 50,000 people, rural counties adjacent to urban areas do not have a city of 10,000 people in the county, and rural counties not adjacent to urban areas do not have a city of 10,000 people. Frontier counties are counties with six or fewer people per square mile. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of dialysis claims files and denominator files from CMS.

- Compared with all Medicare patients, FFS dialysis patients are disproportionately younger and African American (see Chart 2-5).
- In 2015, nearly 20 percent of FFS dialysis patients resided in a rural county.
- Nearly half of all dialysis patients were dually eligible for Medicare and Medicaid services.
- Ninety percent of FFS dialysis patients were enrolled in Part D plans or had other sources of creditable drug coverage.

Chart 11-6. Aggregate margins varied by type of freestanding dialysis facility, 2015

Type of facility	Share of freestanding dialysis treatments	Aggregate margin
All facilities	100%	0.4%
Urban	87	1.3
Rural	13	-5.1
Treatment volume (quintile)		
Lowest	20	-16.9
Second	20	-8.8
Third	20	-2.8
Fourth	20	2.3
Highest	20	6.5

Note: Margins include payments and costs for composite rate services, injectable drugs, and other end-stage renal disease–related services.

Source: Compiled by MedPAC from 2015 cost reports and the 2015 institutional outpatient file from CMS.

- For 2015, the aggregate Medicare margin for composite rate services and injectable drugs was 0.4 percent.
- Generally, freestanding dialysis facilities' margins vary by the size of the facility; facilities with greater treatment volume have higher margins on average. Differences in capacity and treatment volume explain some of the differences observed between the margins of urban and rural facilities. Urban facilities are larger on average than rural facilities with respect to the number of dialysis treatment stations and Medicare treatments provided. Some rural facilities have benefited from the low-volume adjustment that is included in the new end-stage renal disease payment method that began in 2011.

Number of hospice users and hospice spending Chart 11-7. increased while average length of stay declined slightly in 2015

<u></u>					
	2000	2014	2015	Average annual change, 2000–2014	Change, 2014–2015
Beneficiaries in hospice (in millions)	0.534	1.324	1.381	6.7%	4.3%
Medicare payments (in billions)	\$2.9	\$15.1	\$15.9	12.4%	5.5%
Average length of stay among decedents (in days)	53.5	88.2	86.7	3.6%	-1.7%
Median length of stay among decedents (in days)	17	17	17	0 days*	0 days*

Note:

Average length of stay is calculated for decedents who used hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime. Due to rounding, the percentage change displayed in the chart may not equal the percentage change calculated using the yearly data displayed in the chart.

\*This figure reflects the raw change rather than the percentage change.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the 100 percent hospice claims standard analytic file from CMS.

- The number of Medicare beneficiaries receiving hospice services continued to grow in 2015, suggesting that access to hospice care has increased.
- Average length of stay declined slightly between 2014 and 2015 because of a decrease in length of stay among patients with the longest stays.
- Total Medicare payments to hospices were about \$15.9 billion in 2015, about 5.5 percent higher than the prior year.

Chart 11-8. Hospice use increased across beneficiary groups from 2000 to 2015

	Share of decedents using hospice			Average annual percentage	Percentage
	2000	2014	2015	point change 2000–2014	point change 2014–2015
All	22.9%	47.9%	48.6%	1.8	0.7%
FFS beneficiaries	21.5	46.8	47.6	1.8	0.8
MA beneficiaries	30.9	50.9	51.1	1.4	0.2
Dual eligibles	17.5	42.6	43.1	1.8	0.5
Non-dual eligibles	24.5	49.6	50.3	1.8	0.7
Age (years)					
<65	17.0	29.5	29.9	0.9	0.4
65–84	24.7	45.7	46.1	1.5	0.4
85+	21.4	56.1	57.1	2.5	1.0
Race/ethnicity					
White	23.8	49.8	50.5	1.9	0.7
Minority	17.3	37.7	38.4	1.5	0.7
Gender					
Male	22.4	43.9	44.5	1.5	0.6
Female	23.3	51.5	52.3	2.0	8.0
Beneficiary location					
Urban	24.2	49.1	49.7	1.8	0.6
Micropolitan	18.3	44.1	44.9	1.8	8.0
Rural, adjacent to urban	17.5	43.4	44.4	1.9	1.0
Rural, nonadjacent to urban	15.0	38.1	38.8	1.7	0.7
Frontier	13.1	32.5	33.8	1.4	1.3

Note: FFS (fee-for-service), MA (Medicare Advantage). "Beneficiary location" refers to the beneficiary's county of residence. Urban, micropolitan, and rural designations are based on the urban influence codes. This chart uses the 2013 urban influence code definition. In prior data books, the chart has used the 2003 urban influence code definitions. The frontier category is defined as population density equal to or less than six persons per square mile.

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

- Hospice use grew in all beneficiary groups in 2015, continuing the trend of a growing proportion of beneficiaries using hospice at the end of life.
- Despite this growth, hospice use continued to vary by demographic and beneficiary characteristics. Medicare decedents who were older, White, female, MA enrollees, not dual eligible, or living in an urban area were more likely to use hospice than their respective counterparts.

Chart 11-9. Number of Medicare-participating hospices has increased due to growth in for-profit hospices

	2000	2013	2014	2015
All hospices	2,255	3,925	4,092	4,199
For profit	672	2,418	2,588	2,715
Nonprofit	1,324	1,309	1,305	1,293
Government	257	198	199	185
Freestanding	1,069	2,844	3,024	3,138
Hospital based	785	553	535	523
Home health based	378	503	510	514
SNF based	22	25	23	24
Urban	1,455	2,932	3,102	3,235
Rural	757	945	944	920

Note: SNF (skilled nursing facility). Numbers may not sum to totals because of missing data for a small number of providers. The rural and urban definitions in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census). In prior data books, this chart has used rural and urban definitions based on the 2000

Source: MedPAC analysis of Medicare cost reports, Provider of Services file, and the standard analytic file of hospice claims from

- There were nearly 4,200 Medicare-participating hospices in 2015. Most of them were forprofit hospices.
- Between 2000 and 2015, the number of Medicare-participating hospices grew by more than 1,900 providers. For-profit hospices accounted almost entirely for that growth.
- Growth in the number of providers has occurred predominantly among freestanding and home health-based providers. The number of hospital-based providers has declined.
- The number of hospices in rural areas declined between 2014 and 2015 by about 2.5 percent.

Chart 11-10. Hospice cases and length of stay, by diagnosis, 2015

Diagnosis	Share of total cases	Percent of cases with length of stay greater than 180 days
Concer	200/	00/
Cancer Alzheimer's, nervous system disorders,	28%	9%
organic psychosis	22	34
Circulatory, except heart failure	18	25
Heart failure	10	21
Respiratory disease	6	14
Chronic airway obstruction, NOS	5	27
Other	5	14
Genitourinary disease	3	8
Digestive disease	2	9
All	100	20

Note: NOS (not otherwise specified). Cases include all patients who received hospice care in 2015, not just decedents. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim. The share of cases with length of stay greater than 180 days reflects the share of hospice patients who received hospice care in 2015 whose lifetime length of hospice stay exceeded 180 days at the end of 2015 (or at the time of death or discharge in 2015 if the beneficiary was not enrolled in hospice at the end of 2015). "Share of total cases" column may not sum to 100 percent because of rounding.

Source: MedPAC analysis of 100 percent hospice claims standard analytic file from CMS and the Medicare Beneficiary Database.

- In 2015, the most common primary diagnoses among Medicare hospice patients were cancer (28 percent), neurological conditions (Alzheimer's disease, nervous system disorders, and organic psychosis) (22 percent of cases), circulatory conditions other than heart failure (18 percent), and heart failure (10 percent).
- Length of stay varies by diagnosis. One-quarter or more of hospice patients in 2015 with Alzheimer's disease and other nervous system disorders, chronic airway obstruction, and circulatory conditions (other than heart failure) had lengths of stay exceeding 180 days. Long hospice stays were least common among beneficiaries with genitourinary disease, digestive disease, and cancer.

Hospice length of stay among decedents decreased Chart 11-11. slightly in 2015 due to a decrease in length of stay among patients with the longest stays

	Average length of stay		Percentiles	s of length of st	ay (in days)	
Year	(in days)	10th	25th	50th	75th	90th
2000	53.5	3	6	17	56	141
2001	54.9	3	6	17	57	146
2002	58.2	3	6	17	59	157
2003	62.2	3	6	17	62	170
2004	66.0	3	5	17	63	180
2005	71.3	3	5	17	67	194
2006	75.6	3	5	17	70	208
2007	79.7	3	5	17	73	222
2008	83.4	2	5	17	75	235
2009	84.4	3	5	17	76	237
2010	86.1	3	5	17	77	240
2011	86.3	2	5	17	78	240
2012	88.0	2	5	18	80	246
2013	87.8	2	5	17	79	246
2014	88.2	2	5	17	79	247
2015	86.7	2	5	17	80	240

Data reflect hospice length of stay for Medicare decedents who used hospice at the time of death or before death. "Length Note: of stay" reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS.

- Average length of stay among decedents, which grew from 53.5 days in 2000 to 88.2 days in 2014, declined slightly in 2015 to 86.7 days.
- The decrease in average length of stay in 2015 was a result of a decrease in length of stay among patients with the longest stays. The 90th percentile in length of stay decreased from 247 days in 2014 to 240 days in 2015. In prior years, most growth in hospice length of stay occurred among decedents with the longest stays. Between 2000 and 2014, the 90th percentile in length of stay grew from 141 days to 247 days.
- Short stays in hospice have changed little since 2000. The median length of stay in hospice was about 17 days from 2000 to 2015. Hospice length of stay at the 25th percentile has been 5 or 6 days and at the 10th percentile has been 2 or 3 days since 2000.

Chart 11-12. Hospice length of stay among decedents, by beneficiary and hospice characteristics, 2015

	Average length	Length of	f stay percentiles (	in days)
	of stay (in days)	10th	50th	90th
Beneficiary				
Diagnosis				
Cancer	53	3	18	131
Neurological	147	3	33	437
Heart/circulatory	91	2	15	267
COPD	116	2	24	339
Other	51	2 2	8	134
Site of service				
Home	89	4	26	233
Nursing facility	105	3	20	308
Assisted living facility	152	3 5	51	432
Hospice				
For profit	105	3	21	304
Nonprofit	65	3 2	13	176
Freestanding	89	2	17	248
Home health based	69	2	15	187
Hospital based	55	2	12	145

Note: COPD (chronic obstructive pulmonary disease). Average length of stay is calculated for Medicare beneficiaries who died in 2015 and used hospice that year, and it reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim.

Source: MedPAC analysis of 100 percent hospice claims standard analytic file data, Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file data from CMS.

- Hospice average length of stay among decedents varies by both beneficiary and provider characteristics. Most of this variation reflects differences in length of stay among patients with the longest stays (i.e., at the 90th percentile). Length of stay varies much less for patients with shorter stays (i.e., at the 10th or 50th percentile).
- Beneficiaries with neurological conditions and COPD have the longest stays while beneficiaries with cancer have the shortest stays on average.
- Beneficiaries who receive hospice services in assisted living facilities have longer stays on average than beneficiaries who receive care at home or at a nursing facility.
- For-profit and freestanding hospices have longer average lengths of stay than nonprofit and provider-based (home health— and hospital-based) hospices.

Chart 11-13. Nearly 60 percent of Medicare hospice spending in 2015 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2015 (in billions)		
All hospice users in 2015	\$15.9		
Beneficiaries with LOS > 180 days Days 1–180 Days 181–365 Days 366+	9.2 3.0 2.9 3.3		
Beneficiaries with LOS ≤ 180 days	6.5		

Note: LOS (length of stay). LOS reflects the beneficiary's lifetime LOS as of the end of 2015 (or at the time of death or discharge in 2015 if the beneficiary was not enrolled in hospice at the end of 2015). All spending reflected in the chart occurred only in 2015. Break-out groups do not sum to total because of rounding and because they exclude about \$0.1 billion in payments to hospices for physician visits.

Source: MedPAC analysis of 100 percent hospice claims standard analytic file data and the common Medicare enrollment file from CMS.

- In 2015, Medicare hospice spending on patients with stays exceeding 180 days was more than \$9 billion, nearly 60 percent of all Medicare hospice spending that year.
- About \$3.3 billion, or about 20 percent, of Medicare hospice spending in 2015 was on hospice care for patients who had already received at least one year of hospice.

Chart 11-14. Hospice aggregate Medicare margins, 2008–2014

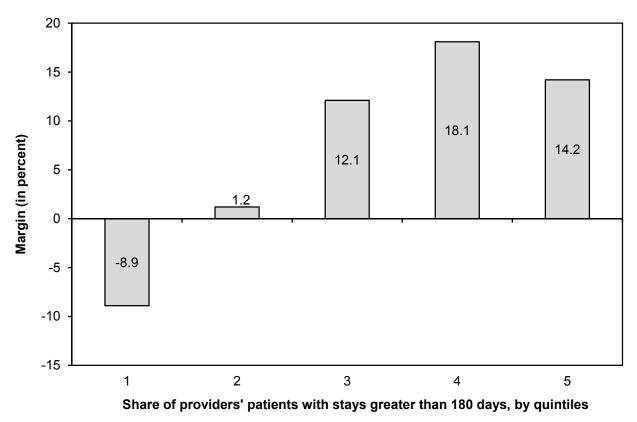
	Share of hospices (2014)	Medicare margin					
		2008	2011	2012	2013	2014	
All	100%	5.3%	8.7%	10.0%	8.5%	8.2%	
Freestanding	74	8.3	11.8	13.3	12.0	11.5	
Home health based	12	3.2	6.1	5.5	2.5	3.8	
Hospital based	13	-12.4	-17.0	<b>–17.1</b>	-17.4	-20.3	
For profit	63	10.2	14.7	15.4	14.7	14.5	
Nonprofit	32	0.5	2.3	3.6	0.9	-0.7	
Government	5	N/A	N/A	N/A	N/A	N/A	
Urban	77	5.7	9.0	10.3	8.8	8.7	
Rural	23	1.9	5.2	7.3	5.9	3.6	
Below cap	87.8	5.7	8.9	10.3	8.6	8.4	
Above cap Above cap (including	12.2	1.2	4.1	5.2	7.0	6.0	
cap overpayments)	12.2	19.1	18.4	21.3	20.1	18.8	

Note: N/A (not available). Margins for all provider categories exclude overpayments to above-cap hospices except where specifically indicated. Margins are calculated based on Medicare-allowable, reimbursable costs. The percentage of freestanding and provider-based (home health-based and hospital-based) hospices does not sum to 100 percent because skilled nursing facility-based hospices are not broken out separately. The share of hospices may not sum to 100 percent for other categories due to rounding.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims standard analytic file, and Medicare Provider of Services data from CMS.

- The aggregate Medicare margin was 8.2 percent in 2014, down slightly from 8.5 percent in 2013.
- Margin estimates do not include nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce margins by at most 1.4 percentage points and 0.3 percentage point, respectively). Margins also do not include the costs and revenues associated with fundraising.
- Freestanding hospices had higher margins than provider-based (home health— and hospital-based) hospices, in part, because of differences in their indirect costs. Provider-based hospices' indirect costs are higher than those of freestanding providers and are likely inflated because of the allocation of overhead from the parent provider.
- In 2014, for-profit hospice margins were strong at 14.5 percent. The aggregate margin for nonprofit hospices was –0.7 percent, but the subset of nonprofit hospices that were freestanding had a higher margin, 3.4 percent (latter not shown in chart).
- Hospices that exceeded the cap (Medicare's aggregate average per beneficiary payment limit) had a margin of nearly 19 percent before the return of the cap overpayments.

Chart 11-15. Medicare margins were higher among hospices with more long stays, 2014



Margins exclude overpayments to hospices that exceeded the cap on the average annual Medicare payment per Note: beneficiary. Margins are calculated based on Medicare-allowable, reimbursable costs. For hospice providers in the lowest (first) quintile, the share of stays greater than 180 days was less than 12.3 percent; it was between 12.3 percent and 18.8 percent in the second quintile; it was between 18.8 percent and 25.6 percent in the third quintile; it was between 25.6 percent and 33.3 percent in the fourth quintile; and it was greater than 33.3 percent in the highest (fifth) quintile.

Source: MedPAC analysis of Medicare hospice cost reports and 100 percent hospice claims standard analytic file from CMS.

- Medicare's per diem payment system for hospice has provided an incentive for longer lengths of stay.
- Hospices with more patients who had stays greater than 180 days generally had higher margins in 2014. Hospices in the lowest length-of-stay quintile had a margin of -8.9 percent compared with an 18.1 percent margin for hospices in the second highest length-of-stay quintile.
- Margins were somewhat lower in the highest length-of-stay quintile (14.2 percent) compared with the second highest quintile (18.1 percent) because some hospices in the highest quintile exceeded Medicare's aggregate payment cap and were required to repay the overage. Hospices exceeding the cap had a margin of nearly 19 percent before the return of overpayments (see Chart 11-14).

Chart 11-16. Hospices that exceeded Medicare's annual payment cap, selected years

	2002	2011	2012	2013	2014
Share of hospices exceeding the cap	2.6%	9.8%	11.0%	10.7%	12.2%
Average payments over the cap per hospice exceeding the cap (in thousands)	\$470	\$424	\$510	\$460	\$370
Payments over the cap as a percent of overall Medicare hospice spending	0.6%	1.1%	1.4%	1.3%	1.2%

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year. These estimates of hospices that exceeded the aggregate cap are based on the Commission's analyses. While the estimates are intended to approximate those of the Medicare claims-processing contractors, they are not necessarily identical to the contractors' estimates because of differences in available data and methodology.

Source: MedPAC analysis of 100 percent hospice claims standard analytic file data, Medicare hospice cost reports, Provider of Services file data from CMS, and CMS Providing Data Quickly system. Data on total spending for each fiscal year are from the CMS Office of the Actuary.

- The share of hospices exceeding the aggregate cap increased from 10.7 percent in 2013 to 12.2 percent in 2014.
- Medicare payments over the cap represented 1.2 percent of total Medicare hospice spending in 2014.
- On average, above-cap hospices exceeded the cap by about \$370,000 per provider in 2014, down from about \$460,000 per provider in 2013.

Chart 11-17. Hospice live-discharge rates, 2013-2015

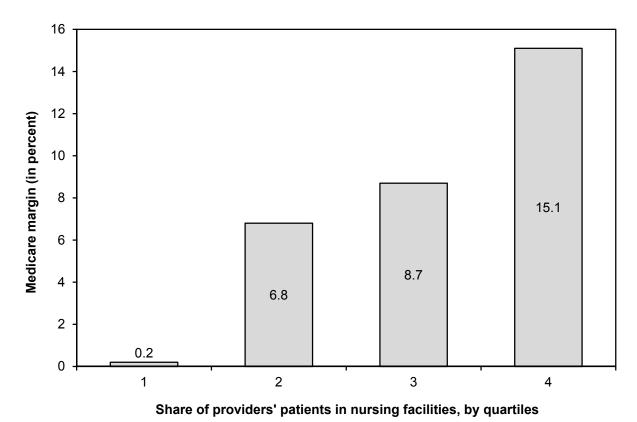
	2013	2014	2015
Live discharge as a share of			
all discharges, by reason for			
live discharge			
All live discharges	18.4%	17.2%	16.7%
No longer terminally ill	7.8	7.3	6.9
Beneficiary revocation	7.3	6.6	6.3
Transfer hospice providers	2.0	2.0	2.1
Move out of service area	0.9	0.9	1.0
Discharge for cause	0.4	0.3	0.3
Providers' overall rate of live discharge	e as a		
share of all discharges, by percentile			
10th percentile	9.3	8.5	8.4
25th percentile	13.2	12.3	12.0
50th percentile	19.4	18.7	18.4
75th percentile	30.2	30.2	29.6
90th percentile	47.2	50.0	50.0

Note: Percentages may not sum to 100 due to rounding.

Source: MedPAC analysis of 100 percent hospice claims standard analytic file.

- The overall live discharge rate declined from 18.4 percent in 2013 to 17.2 percent in 2014 to 16.7 percent in 2015.
- Between 2013 and 2015, the decline in the overall rate of live discharge reflects a decline in the rate of beneficiaries discharged alive because they are no longer terminally ill and a decline in the rate of beneficiaries revoking the hospice benefit.
- Live discharges accounted for half or more of total discharges among the 10 percent of hospices with the highest live-discharge rates (i.e., the 90th percentile) in 2015.

Chart 11-18. Margins were higher among hospices with a greater share of their patients in nursing facilities, 2014



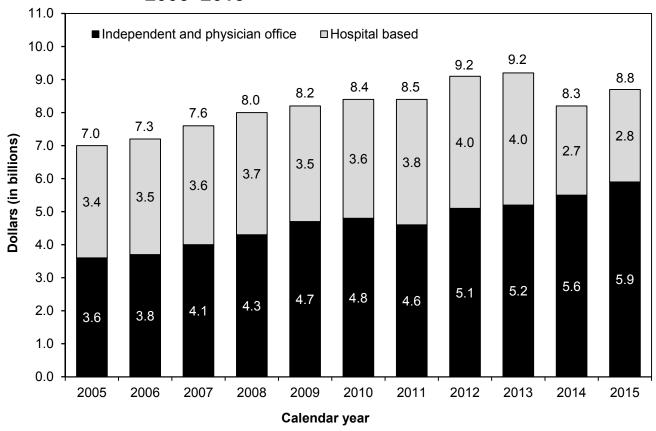
Margins exclude overpayments to hospices that exceed the cap on the average annual Medicare payment per

Source: MedPAC analysis of Medicare hospice cost reports and 100 percent hospice claims standard analytic file from CMS.

beneficiary. Margins are calculated based on Medicare-allowable, reimbursable costs.

- Hospices with a large share of their patients in nursing facilities have higher margins than other hospices.
- The higher profitability of hospices serving many nursing facility patients may be due to a
  combination of factors, such as longer lengths of stay, possible efficiencies in treating
  patients in a centralized location (e.g., lower mileage costs and less staff time for travel), and
  overlap in responsibilities between the hospice and the nursing facility.

Medicare spending for clinical laboratory services, Chart 11-19. 2005-2015



Note: Spending is for services paid under the clinical laboratory fee schedule. Hospital-based services are furnished in labs owned or operated by hospitals. Total spending appears on top of each bar. The components of each bar may not sum to the total at the top of each bar due to rounding. The spending data include only program payments; there is no beneficiary cost sharing for clinical lab services.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2016.

- Medicare spending for clinical laboratory services in all settings grew by an average of 3.4 percent per year between 2005 and 2013. This growth was primarily driven by rising volume since there were very few increases in payment rates during those years.
- Medicare spending for lab services declined by 9.0 percent in 2014 because, beginning in 2014, most lab tests provided in hospital outpatient departments are no longer paid separately under the clinical lab fee schedule. Instead, most of these tests are packaged with their associated visits or procedures under the hospital outpatient prospective payment system.
- Medicare spending for lab services increased by 5.0 percent from 2014 to 2015—5.7 percent in independent and physician-office labs and 3.6 percent in hospital-based labs. In 2015, independent and physician-office labs accounted for 68 percent of Medicare spending for all lab services; hospital-based labs accounted for the remaining 32 percent.